

## **REMARKS**

In response to the Office Action dated November 8, 2011, the Assignee respectfully requests reconsideration based on the above amendments and on the following remarks.

Claims 1, 5-14, 36, 39-46, and 52 are pending in this application. Claims 2-4, 15-35, 37-38, and 47-51 were previously canceled without prejudice or disclaimer.

### **Rejection of Claims under § 103 (a)**

The Office again rejected claims 1, 5-14, 36, 39-46, and 52 under 35 U.S.C. § 103 (a) as being obvious over U.S. Patent 6,005,861 to Humpleman in view of U.S. Patent 6,493,875 to Eames, *et al.*, in view of U.S. Patent 6,732,366 to Russo, and further in view of U.S. Patent 4,890,168 to Inoue, *et al.*

These claims, though, cannot be obvious. As the Assignee previously explained, these claims already recite, or incorporate, features that distinguish over *Humpleman*, *Eames*, *Russo*, and *Inoue*. Independent claim 1, for example, recites “*a plurality of buses interconnecting internal components of a gateway.*” Support for these features may be found at least at page 22, lines 16-17 and illustrated in FIG. 6 of the as-filed application. Even though *Humpleman*, *Eames*, *Russo*, and *Inoue* describes a set-top box, the Assignee previously explained that the proposed combination expressly eschews “*a plurality of buses interconnecting internal components of a gateway.*” The proposed combination of *Humpleman*, *Eames*, *Russo*, and *Inoue* teaches that network interfaces are separated from the internal components of the set-top box. As *Humpleman* explains:

**The present invention, as shown in FIGS. 1 and 2, separates the functionality of the network interface units 32 from the set-top electronics 40. Conventionally, a set-top box contains a network interface unit whose components are internally connected by a bus to the set-top electronics components. By contrast, however, the present invention provides a separation of the network interface units 32 and the set-top electronics 40, with the internal network 34**

**interposed therebetween.** This arrangement permits multiple set-top electronics to be distributed throughout the home 36 less expensively, since the electronics of a network interface unit do not have to be duplicated for each set-top electronics. Additionally, having separate network interface units 32 coupled to different external networks and to a common internal network 34 frees the homeowner from being forced to receive all programming from a single source, such as the telephone or cable company. The separation also allows the homeowner to add, drop or change services simply by changing one of the network interface units 32, without the need for replacing all of the set-top electronics 40 throughout the home 36.

See U.S. Patent 6,005,861 to Humpleman at column 4, line 66 through column 5, line 19 (emphasis added). Here *Humpleman* explains that conventional the network interface units are connected by a bus to the internal components of the set-top box. *Humpleman's* invention, in contrast, separates the network interface units from the internal components of the set-top box.

The Office now responds and says this distinction is not persuasive. The Examiner cites to *Humplemen's* teaching of a “master” set-top box:

In certain embodiments, a "master" set-top box is provided with multiple network interface units. **However**, this embodiment is logically the same as described above, as **the network interface units are connected** in this embodiment **to the internal network, and not by a bus to the set-top electronics**.

See U.S. Patent 6,005,861 to Humpleman at column 5, lines 20-25 (emphasis added). The Examiner contends that this “master” set-top box “would take the place of switch hub 38 and NIU bank 30” illustrated in *Humplemen's* FIG. 2. See Examiner Saltarelli, Office Action mailed November 8, 2011 at page 2, last paragraph. Remote set-top boxes would be found in various rooms, and the Examiner contends that the “master” set-top box still teaches the bus structure described by independent claim 1.

The Examiner is mistaken. The Examiner has, very respectfully, misinterpreted *Humpleman*. As *Humpleman* expressly states, “the network interface units [in this “master” set-top box] are connected in this embodiment to the internal network, **and not by a bus to the set-**

**top electronics**” (emphasis added). So, as the Assignee previous explained, even if the network interface units are included in a “master” set top box, the network interface units are NOT connected by a bus to the internal components of the set-top box.

Independent claim 1, therefore, must distinguish over *Humpleman, Eames, Russo, and Inoue*. Independent claim 1 recites “*a media bus of the plurality of buses ... connected to the multiple pairs of the tuner and the demodulator.*” Even if *Humpleman*’s “master” set-top box “would take the place of switch hub 38 and NIU bank 30,” as the Examiner contends, *Humpleman*’s “master” set-top box cannot be connected to “*a media bus of the plurality of buses,*” as independent claim 1 recites. Any connection between a “*tuner and the demodulator*” (e.g., *Humpleman*’s network interface units) and the “*media bus*” is counter to *Humpleman*’s express statement that “the network interface units are connected in this embodiment to the internal network, and not by a bus to the set-top electronics” (emphasis added). The Examiner has thus , very respectfully, misinterpreted *Humpleman*. When *Humpleman* is properly interpreted, the proposed combination of *Humpleman, Eames, Russo, and Inoue* cannot teach all the claimed features of independent claim 1.

Independent claim 36 must also distinguish. Independent claim 36 already recites “*interconnecting a plurality of buses to internal components of a gateway*” and “*connecting an input of a digital converter in the gateway to the multiple pairs of the tuner and the demodulator.*” As the above paragraphs explained, *Humpleman, Eames, Russo, and Inoue* expressly teaches that “the network interface units are connected in this embodiment to the internal network, and not by a bus to the set-top electronics” (emphasis added). Independent claim 36 further recites more electronic circuitry, such as “*connecting an output of the digital converter ... to .. a media bus of the plurality of buses*” and “*connecting ... decryption logic ... to the multiple pairs of the tuner and the demodulator.*” Independent claim 36 further recites “*connecting ... the media bus to ... the decryption logic*” and “*connecting ...the media bus to a system data bus of the plurality of buses.*” Independent claim 36 further recites connections between “*a video overlay processor,*” “*the media bus,*” and “*the system data bus.*” These circuitry connections to the “*plurality of buses*” are counter to *Humpleman*’s express statement

that “the network interface units are connected in this embodiment to the internal network, and not by a bus to the set-top electronics” (emphasis added). Independent claim 36 must thus distinguish over *Humpleman, Eames, Russo, and Inoue*.

Independent claim 52 must also distinguish. Independent claim 52 already recites “a plurality of buses interconnecting internal components of a gateway.” As the above paragraphs explained, *Humpleman, Eames, Russo, and Inoue* expressly teaches that “the network interface units are connected in this embodiment to the internal network, and not by a bus to the set-top electronics” (emphasis added). Independent claim 52 further recites more electronic circuitry, such as “processor and memory connected to a system data bus of the plurality of buses” and “multiple pairs of a tuner and a demodulator” connected to “decryption logic.” Independent claim 52 further recites “a media data bus of the plurality of buses ... connected to ... decoder logic and to ... digital converter, the media data bus receiving the reformatted digital information and the digital information and sending the reformatted digital information and the digital information to one of three outputs of the media bus, with a first output of the media bus connected to the system data bus.” Independent claim 52 further recites “a video overlay processor ... connected to ... the media bus” and to “the system data bus.”

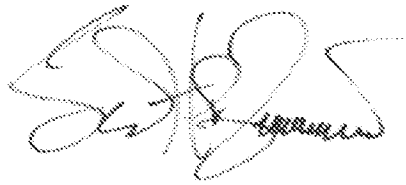
Claims 1, 5-14, 36, 39-46, and 52, then, cannot be obvious over *Humpleman, Eames, Russo, and Inoue*. The independent claims recite many distinguishing features that are exactly counter to *Humpleman*’s express statement (that “the network interface units are connected in this embodiment to the internal network, and not by a bus to the set-top electronics”). Their respective dependent claims incorporate these distinguishing features and recite even more features. One of ordinary skill in the art, then, would not think that these claims are obvious. The Office is respectfully requested to remove the § 103 (a) rejection of these claims.

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If any questions arise, the Examiner is invited contact the undersigned at (919) 469-2629 or [scott@scottzimmerman.com](mailto:scott@scottzimmerman.com).

**37 C.F.R. § 1.8 CERTIFICATE OF TRANSMISSION**

I hereby certify that this correspondence is being electronically transmitted via the USPTO EFS web interface on February 3, 2012.

A handwritten signature in black ink, appearing to read "Scott P. Zimmerman", with a stylized flourish at the end.

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